

Other UDOT Traffic Information Brochures:

- Speed Limits
- School Zone Safety
- Traffic Signals
- Pedestrian Signals
- Work Zone Safety

For More Information:

Please contact a UDOT Region Traffic Engineer located in your area of the State:

Northern Utah (801) 620-1600

Salt Lake County (801) 975-4900

Utah County (801) 227-8000

Southern Utah (435) 893-4799

Or visit the UDOT website at
<http://www.udot.utah.gov>

Left Turn Safety Tips

- Watch for pedestrians in crosswalks before making a turn;
- Watch for on-coming vehicles approaching the intersection;
- Be cautious when making a left turn when the left turn signal is yellow.



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Division of Traffic and Safety
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Salt Lake City, Utah 84114-3200

Left Turn Traffic Signals



**Division of Traffic
and Safety**

Left Turn Traffic Signals

The Utah Department of Transportation (UDOT) has prepared this Traffic Information Brochure to educate concerned citizens interested in learning more about left turn traffic signals.

This brochure describes some of the advantages and disadvantages of left turn signal phasing along with answers to commonly asked questions.

Left turn phases at traffic signals are used to reduce delays and accidents for left turning vehicles. However, left turn phases may also increase delay to through traffic, decrease total intersection capacity, and reduce the efficiency of traffic signal coordination.

In order to balance the need to serve left turns against the needs of all traffic at an intersection, UDOT has adopted minimum conditions, called “warrants,” for the installation of left turn signals. The warrants identify minimum traffic volumes, delays, and traffic accident records that justify left turn signals.

When left turn signals are requested, UDOT conducts a traffic study to determine if conditions at the intersection meet the warrants. If so, the left turn signal is programmed for construction.

Commonly Asked Questions:

Why are different types of left turn signals used ?

There are two types of left turn signals commonly used by the Utah Department of Transportation. The first, called “protected,” con-

sists of a signal with three sections displaying green and yellow arrows with and a red circular indication or red arrow.

The second, called “protected / permissive,” consists of a signal with five sections displaying red, green and yellow circular indications, along with green and yellow arrows.

Protected Left Turn Signal

With this type of left turn signal, a driver is legally permitted to make a left turn only when the green left arrow is displayed and all opposing traffic is stopped. When the red arrow is displayed, it is illegal to turn left.



The protected left turn signal is used at double left turns and at locations where limited visibility or high speed opposing traffic could make it difficult to make a left turn safely.

Protected / Permissive Left Turn Signal

The protected portion of the left turn phase occurs when a green arrow is displayed to left turning drivers. All opposing traffic is stopped. The permissive portion follows the protected portion. During the permissive portion, a green circular indication is given and a motorist is permitted to



make a left turn after yielding to opposing traffic and pedestrians.

Why doesn't the left turn arrow come on every time when there is a vehicle in the left turn lane?

At most intersections, left turn traffic is only 10% to 20% of the through traffic volume. Therefore, providing a protected left turn phase in every cycle may unnecessarily delay the majority of traffic passing through the intersection. Most protected/permissive left turn signals are designed to operate with “third vehicle actuation.” This means that the ‘protected’ left turn arrow will not turn on until there are at least three queued vehicles. This helps reduce the total delay for all motorists in the intersection.

In most cases, if there are only one or two vehicles turning left during one signal cycle, drivers are able to complete a left turn by finding gaps in the opposing through traffic. However, once the queue builds up beyond two vehicles, the protected left turn phase is displayed to clear the queue.

How is a study for a new left turn signal requested?

A written request must be made to the UDOT Region Traffic Engineer in your part of the State. You may obtain the appropriate name and address by contacting the local UDOT region office at the numbers listed on the back of this brochure.